## 1990 Editorial Index

Issue	Page	Issue F	age
ADHESIVES		Editorial: Design for Manufacturing	
DFM-Driven Suppliers of the Year	May 39		7
Fasteners and Adhesives Get a Grip		Designing in Quiet Jun	
in New Applications			
Just the Cure			
Suppliers Sticking with Solventless Solutions			,
Suppliers Sticking war sorventess sorutions	000	to Applying TechnologyJul	38
AIR CONDITIONING		Tough Design Choices Ahead for Refrigeration	
Happy New Year for Appliances			
HVAC Molded in Plastics			
Software Slashes Inventory 62%			
Industry Pulls Together to Kick the CFC Habit			
Share of Market			
Component/Material Consumption			
Smart House for Smart Appliances			
HVAC Challenges Ahead			
Creative Welds for Compressors	Apr 58		7
Vinyl Provides Cool Solution to AC Maker's Assembly Problems	May 23	DFM Symposium & Expo: The Greening of the Appliance Industry	21
Gas Share Gaining			
The Inside (and Outside) Story		Accelerating the Race for CFC Alternatives Sep	
of Inter-City's PTAC	Jun 34	'Environmentally Friendly' Appliances Sep	26
Workgroup Network Helps Emerson Quiet Kool	_	Ecological Responsibility Translates	
Breeze Through Parts Design	Jun 56	into 3 Targets Sep	
Marketing, Not Engineering, Key to Applying Technology	Int 26	Wastewater Treatment Pays Off Sep A Cleaner Environment with Gas Sep	
Armstrong Scores High in Synergy Efficiency			
Accelerating the Race for CFC Alternatives			
•	-	Best of Show Sep	72
ALLOYS		Editorial: Dinner with the President Oct	7
Materials Innovations	Jan 55		
ALUMINUM		Between Design and Suppliers Oct Editorial: Kicking the Tires Nov	
Whirlpool Range Divison Cuts Fat		Whirlpool Thinks the World of This Washer	
from Frame Fabrication	Feb 54		24
		ASSEMBLY	
APPLIANCES (General Interest)		Conference Raises Key DFM Issues	
Editorial: Designs on the Soviet Union			42
Happy New Year for Appliances			- 44
Excellence in Design			44
Editorial: There Is Still Hope	Juli 7	to AC Maker's Assembly Problems	23
for the US Electronics Industry	Feb 7		
Redesign—Part I: The Investigation			
Simplicity LTH Lawn Tractor			
Maytag's Dependable Drive			
Lennox' WhisperHeat Furnace Xerox Snap Roller/Shaft Assembly			10
Share of Market			31
Component/Material Consumption	Feb 35	Robots of the Future: Specialized, Task-Specific	
Editorial: The Numbers Are In, and They Look Good	Mar 7	and Dedicated Oct	
Redesign—Part II: The Implementation	Mar 34	Whirlpool Thinks the World of This WasherNov	
Simplicity LTH Lawn Tractor Maytag's Dependable Drive	Mar 34	DFA at Hoover: Greater Quality at Lower CostNov	36
Lennox' WhisperHeat Furnace	Mar 38	AUDIO/VIDEO APPLIANCES	
Xerox Snap Roller/Shaft Assembly	Mar 40	Happy New Year for Appliances Jan	25
'Toast to the Future'	Mar 52	Excellence in Design Jan	36
	Apr 7	Loudspeaker Loses Weight Due to Polystyrene Jan	46
Roundtable: Appliance OEMs, Steel Service Centers		Share of Market	
Talk Design			
Redesign—Part III: The Payoff			
Maytag's Dependable Drive			.2
Lennox' WhisperHeat Furnace			
	Apr 41		-
Xerox Snap Roller/Shaft Assembly	Apr 42	The Road to Better Motors: OEM-Driven, DFM-Powered Mar	20
Redesigns Call for Recycling	Apr 42 Apr 54	The Road to Better Motors: OEM-Driven, DFM-Powered Mar Powder Coater Shoots Blanks, Aims	
Redesigns Call for Recycling Designing for the '90s	Apr 42 Apr 54 Apr 60	The Road to Better Motors: OEM-Driven, DFM-PoweredMar Powder Coater Shoots Blanks, Aims for Appliance OEMs	54
Redesigns Call for Recycling	Apr 42 Apr 54 Apr 60 May 7	The Road to Better Motors: OEM-Driven, DFM-Powered Mar Powder Coater Shoots Blanks, Aims for Appliance OEMs Mar	54 56

1990 Editorial Index			-	
Issue			ssue	Page
Coated Coil Poised to Penetrate New Areas	58	Whirlpool Saves Big with CAD Capability on Small CNCs	un 4	54
in Payback PotentialJul	54	Workgroup Network Helps Emerson Quiet Kool	un .	
Greater Inspection Capability		Breeze Through Parts Design	un :	56
for Your Time and Money	69	Marketing, Not Engineering, Key to Applying Technology	Inl 1	38
for Reliable Quality Control	71			
Whirlpool's Never-Rest Test SystemAug	74			
Total Design Control for Controls	77	CAE Redesigns Call for Recycling	1	5.4
Appliance Pretreatment Top Priority with Coil Coater	60	Redesigns Can for Recycling	pr .	34
Robots of the Future: Specialized, Task-Specific		CAM		
and Dedicated Oct		Workgroup Network Helps Emerson Quiet Kool		.,
3 Hurdles to Pass Enroute to Finish Line		Breeze Through Parts Design		
Whirlpool Thinks the World of This Washer		Lemox madelies ruisating with retion	ug .	50
DFA at Hoover: Greater Quality at Lower CostNov				
Uptime Now at 95% Vs 60%	42		ay 3	39
BATTERIES		DFM Symposium & Expo: The Greening of the Appliance Industry	en 2	21
Excellence in Design Jan	36	or me apparate	ъ.	•
DFM-Driven Suppliers of the Year May				
Design Options Growing with Cordless Sep	70	Leading-Edge Technology Ju	un 4	14
BEARINGS		CERAMICS		
DFM-Driven Suppliers of the Year May		Suppliers Sticking with Solventless Solutions	oct 3	37
Leading-Edge Technolgy Jun	44	CECo		
BLOWERS		CFCs Steel Solutions Ji	an 4	50
The Road to Better Motors: OEM-Driven, DFM PoweredMar	20			
Exhaust System Accelerates Air, Expels Noise		Ultrasonic Welding Cuts Time, Labor, Failures		
and Excites Sales		Tough Design Choices Ahead for Refrigeration		
Motors File		Ecological Responsibility Translates	cp 2	
DFM-Driven Suppliers of the Year May		into 3 Targets		
The Inside (and Outside) Story	24	Insulation Systems Meet Multiple Redesign Needs So	ep 5	57
of Inter-City's PTAC		CIM		
Suppliers of the Year Honored		Whirlpool Saves with Big CAD Capability		
DFM Symposium & Expo: The Greening		on Small CNCs Ju	un s	54
of the Appliance Industry		CIRCUIT BREAKERS		
Small Motors: Costlier Materials + Simple Design =	50	DFM Symposium & Expo: The Greening		
Affordable EfficiencySep		of the Appliance Industry	ep 2	21
Brushless DC: Fast Enough to Clean Arteries Sep	55	CI FANUD ADDI JANCES		
BRAZING		CLEANUP APPLIANCES Happy New Year for Appliances	an 3	25
Creative Welds for Compressors	58	HVAC Molded in Plastics Ja		
DFM-Driven Suppliers of the Year May		Nylon Coating Racks Up Points Against PVC		
Suppliers of the Year Honored	63	for KitchenAid Dishwasher Ja Share of Market Fe		
BUSINESS/OFFICE APPLIANCES		Component/Material Consumption		
Happy New Year for Appliances Jan		Designing for the '90s		
Excellence in Design				
Xerox Snap Roller/Shaft Assembly (Part I)	35	Environmentally Friendly Apphances	ep 4	20
Xerox Snap Roller/Shaft Assembly (Part II)	40			
Mini but Mighty Switches				- 4
Xerox Snap Roller/Shaft Assembly (Part III)		on Small CNCs	un :	54
Editorial: Joint Manufacturing Ventures May		COATED COIL		
Plastics Online in Business/Office Products May		Steel Solutions Ja		
Fax Now in Full Favor Jun The Heat Is On Jul		Steelmakers Step Up Services		
PC Power Packed in Portability Jul		Roundtable: Appliance OEMs, Steel Service Centers	an .	39
Custom Valve Helps Prevent Jamming in Copier	82	Talk Design	pr 2	29
Design Options Growing with CordlessSep		Coated Coil Poised to Penetrate New Areas	ay 5	58
Easy Switching Oct Editorial: Kicking the Tires Nov		With Coated Coil, Reality and Perceived Value Often Differ	av (	52
	,	Lennox a Winner in NCCA Design Showcase		
CABLE	-	Appliance Pretreatment Top Priority		
DFM-Driven Suppliers of the Year		with Coil Coater		
Suppliers of the Teal Honored	03	Coil Coater Fine Tunes Inspection		
CAD				
Redesigns Call for Recycling			on 4	50
Gas Share Gaining May PC-Based CAD Speeds Mainframe Design Jun				

Nylo for Veno Put How Pow for Pow DFM

Lenn Mari to A Supp Trim for App wit Com 3 Hu Fini

Excellent Cook Verification Son The

Hot

CO Isol An

Cre The of Tou

CO Hap Sha Pali Pla PC Wh or Wo Br PC De: Eas Hig Co

CCC Co DF Lea Co C Su DF oi High Eff Co Sw Su

> CO Ha Ex

15500	1 ag	·	12206	ra
Nylon Coating Racks Up Points Against PVC for KitchenAid Dishwasher	64	Editorial: There Is Still Hope	Jan	48
Vending Machine Maker's Change to Powder		for the US Electronics Industry	Feb	7
Puts More Change in Pockets				
How to Succeed at FoilingFeb Powder Coater Shoots Blanks, Aims	33	HDTV: Watch for It by the Mid-1990s		
for Appliance OEMs	54			
Powder Cuts Rejects to 2% from 15%	56	Connector Count Cut—Cops Capture	•	
DFM-Driven Suppliers of the Year May		Communications Capability	. Jul	33
Lennox a Winner in NCCA Design ShowcaseJun	49			
Marketing, Not Engineering, Key to Applying TechnologyJul	38	Best of Show		
Suppliers of the Year HonoredAug	63	Suppliers Sticking with Solventless Solutions	Oct	37
Trim Maker's Test Scratches the Surface				
for Reliable Quality Control	71	CONTROLS	r.,	477
Appliance Pretreatment Top Priority with Coil Coater	60	Design Trends Add Value to Controls & Sensors		
Comeback for Porcelain? Powder for Range Parts?		DFM-Drive, Suppliers of the Year		
3 Hurdles to Pass Enroute to Finish Line		To Heatcraft, Lennox Is One Customer Among Many		
Finishing File		Suppliers of the Year Honored	Aug	63
COMMERCIAL APPLIANCES		Total Design Control for Controls		
Excellence in Design	36	Food-Item Push Buttons for Gas Convection	Oct	48
Vending Machine Maker's Change to Powder				
Puts More Change in Pockets Jan		CONVEYORS		
Cooling with Gas Jan Vending Machine Makers Coining Lots of Change Feb		Vending Machine Maker's Change to Powder Puts More Change in Pockets	Ion	66
Element Developments: Efficiency Goes Down	43	r dis More Change in Fockets	Jan	00
to the Wire	48	COOKING APPLIANCES		
Something's Cooking in IgnitersJul		Happy New Year for Appliances		
Thermostats Tilt Toward Tighter TolerancesJul		Excellence in Design HVAC Molded in Plastics		
Hot Stuff	86	Is Powder Coming On Line for Coated Coil?		
COMPOSITES		Cooking Out; Working Out		
Isolate-and-Absorb Strategy Quiets Dishwashers Jun		Share of Market		
An All-Plastic Appliance?	20	Component/Material Consumption		
COMPRESSORS		Design Trends Add Value to Controls & Sensors	reo	4/
Creative Welds for Compressors Apr	58	from Frame Fabrication	Feb	54
The Inside (and Outside) Story		Exhaust System Accelerates Air, Expels Noise		
of Inter-City's PTAC Jun		and Excites Sales	Mar	22
Tough Design Choices Ahead for Refrigeration	49	Element Developments: Efficiency Goes Down to the Wire	Mor	10
COMPUTERS		A Gas Alternative to the Microwave		
Happy New Year for Appliances Jan	25	Designing for the '90s		
Share of MarketFeb		Gas Share Gaining	May	68
Palmtops, Laptops Driving PC Market		Fasteners and Adhesives Get a Grip	L	21
Plastics Online in Business/Office Products May PC-Based CAD Speeds Mainframe Design Jun		in New Applications Something's Cooking in Igniters		
Whirlpool Saves with Big CAD Capability	00	Microwave Oven Seal Serves Dual Purpose		
on Small CNCs Jun	54.			
Workgroup Network Helps Emerson Quiet Kool		An All-Plastic Appliance?	Aug	20
Breeze Through Parts Design Jun PC Power Packed in Portability Jul	36	Focy Switching	Oct	16
Design Options Growing with Cordless Sep	70	Igniter Innovations for the Kitchen and Roof	Oct	42
Easy Switching Oct	16	Food-Item Push Button for Gas Convection	Oct	48
High-Tech Link for Computers Oct	24	Comeback for Porcelain? Powder for Range Parts?	Vov	20
Connectors Enhance Link with Electronics Oct	28	3 Hurdles to Pass Enroute to Finish Line	Vov	25
CONNECTORS		COPPER		
Cordsets of the '90s: American Manufacturability;		To Heatcraft, Lennox Is One Customer Among Many	Aug	46
European Marketability		CODDI ESCADDI LANCES		
Connectors and Cords Roundup	46 39	CORDLESS APPLIANCES Excellence in Design	Ian	36
Leading-Edge Technology Jun		Cooking Out; Working Out		
Connector Count Cut—Cops Capture		Design Options Growing with Cordless	Sep	70
Communications Capability		CORDS		
Suppliers of the Year HonoredAug	63	Cordsets of the '90s: American Manufacturability;		
DFM Symposium & Expo: The Greening of the Appliance Industry	21	European Marketability		
High-Tech Link for Computers Oct		Connectors and Cords Roundup	Apr	46
Efficient Termination Oct	27	DFM-Driven Suppliers of the Year		
Connectors Enhance Link with Electronics Oct		Suppliers of the Year Honored		
Switches, Connectors & Cords File Oct Suppliers Sticking with Solventless Solutions Oct	29	Switches, Connectors & Cords File		
Suppliers Sticking with Solventiess Solutions	31			
CONSUMER ELECTRONICS		COST SAVINGS Steelmakers Step Up Services	Inn	52
	25	Software Slashes Inventory 62%		
Excellence in Design Jan	30	Is Powder Coating On Line for Coated Coil?		

1990 Editorial Index	Po	nge r.	cene	Page
Vending Machine Maker's Change to Powder	4 6			
Puts More Change in Pockets	66	Xerox Snap Roller/Shaft Assembly F Cooking Out; Working Out F		
Peristaltic Pump Preserves Pounds Jan	70	Vending Machine Makers Coining Lots of Change F		
Design Trends Add Value to Controls & Sensors Feb				
Whirlpool Range Division Cuts Fat from Frame Fabrication		Whirlpool Range Division Cuts Fat		
from Frame FabricationFeb	54	from Frame Fabrication		
The Road to Better Motors: OEM-Driven, DFM-PoweredMar				
Engineering Plastics in Appliance Motors			eb .	56
Element Developments: Efficiency Goes Down	42	and Excites Sales	lar '	22
to the Wire	48			
Powder Coater Shoots Blanks, Aims		Redesign—Part II: The Implementation		
for Appliance OEMs		Simplicity LTH Lawn Tractor		
Powder Cuts Rejects to 2% from 15%	56	Maytag's Dependable Drive	lar :	36
Restoring Luster to Steel	20			
Talk Design	20	Xerox Snap Roller/Shaft Assembly		
The Art of Part Planning		'Toast to the Future'		
Ultrasonic Welding Cuts Time, Labor, Failures				
Creative Welds for Compressors				
Vinyl Provides Cool Solution		Roundtable: Appliance OEMs, Steel Service Centers		
to AC Maker's Assembly Problems		Talk Design A		
Plastics Online in Business/Office Products	28			
With Coated Coil, Reality and Perceived Value	62	Simplicity LTH Lawn Tractor		
Often Differ	02	Maytag's Dependable Drive		
in New Applications	21	Xerox Snap Roller/Shaft Assembly		
Modern Fastening Solutions Connected		Cordsets of the '90s: American Manufacturability:		
by Ancient Thread Jun	30	European Marketability A	pr	44
The Inside (and Outside) Story		The Art of Part Planning	pr	49
of Inter-City's PTAC	34			
Whirlpool Saves with Big CAD Capability on Small CNCs	54	Designing for the '90s	pr (	60
The Heat Is OnJul	25	Vinyl Provides Cool Solution	pr (	64
3D Plating Process Excises 24 Parts, Cuts Cost	40	to AC Maker's Assembly Problems	av '	23
of Medical ApplianceJul	32	Majors May Take 'Knocks' from Plastics	av :	25
Connector Count Cut—Cops Capture		Plastics Online in Business/Office Products		
Communications Capability	33			
Just the CureJul		in Housewares Ma		
An All-Plastic Appliance?	20			
Greater Inspection Capability for Your Time and Money	60	Coated Coil Poised to Penetrate New Areas	ay :	58
Today's Motor Design Puts the Brakes on CostsSep			av é	62
Small Motors: Costlier Materials + Simple Design =	50	Europe 1992 a Plus for Some Appliance Makers		
Affordable Efficiency Sep	53	Here's to Good Looks and Good Health	av :	72
Speed Queen Takes Charge of Waste Sep	64	New Screw Designs for Fastening Plastics	un 2	25
Easy Switching Oct	16			
4th Annual DFM Roundtable—Purchasing: DFM Conduit		by Ancient Threads Ju		
Between Design and Suppliers Oct Fast-Cure Structural Adhesives Oct			ın 3	33
Suppliers Sticking with Solventless Solutions Oct		The Inside (and Outside) Story of Inter-City's PTAC	1	24
Whirlpool Thinks the World of This Washer		Isolate-and-Absorb Strategy Quiets Dishwashers		
DFA at Hoover: Greater Quality at Lower Cost		Broan's Bigger Bathroom Fans Exhaust		,
		Noise Problem Ju	un 4	40
DECORATIVE TRIM	-	Sound-Damping Metals May be Tomorrow's		
Steel Solutions	50	Competitive Edge		
Whirlpool Range Division Cuts Fat from Frame Fabrication Feb	54	Leading-Edge Technology Ju Lennox a Winner in NCCA Design Showcase Ju		
Trends in Trim Feb	-	Comfort Coupled with Convenience		
DFM-Driven Suppliers of the Year		Just the Cure		
Trim Maker's Test Scratches the Surface		Crankshaft Seal Cures In-Storage Ills		•
for Reliable Quality Control	71	of Briggs & Stratton Engine	ul 3	36
P. P		Microwave Oven Seal Serves Dual Purpose		
DESIGN Conference Raises Key DFM Issues	0	Thermostats Tilt Toward Tighter Tolerances		
Excellence in Design	8	PC Power Packed in Portability		
Loudspeaker Loses Weight Due to Polystyrene Jan		An All-Plastic Appliance?		
HVAC Molded in Plastics Jan		Plastics Take Pressure Out of Water Heating		
Is Powder Coming On Line for Coated Coil? Jan		Lennox Special Section	ig 3	31
Nylon Coating Racks Up Points Against PVC		Lennox' Vision Is Clear: Define and Execute	ig 3	32
for KitchenAid Dishwasher	64	Lennox Industries Pulsating with Action		
Vending Machine Maker's Change to Powder		To Heatcraft, Lennox Is One Customer Among ManyAu		
Puts More Change in Pockets Jan Peristaltic Pump Preserves Pounds Jan	66	Armstrong Scores High in Synergy Efficiency		
Cooling with Gas Jan		Total Design Control for Controls		
Redesign—Part I: The Implementation		'Design for Recycling'		
Simplicity LTH Lawn Tractor Feb	24	Hot StuffAu		
Simplicity LTH Lawn Tractor Feb Maytag's Dependable Drive Feb Lennox' WhisperHeat Furnace Feb	26	Hot Stuff Au 'Environmentally Friendly' Appliances Se Greener Lawns Se	p 2	26

Tod Sma Afr Des Best Easy High 4th Be Fast Sup Foo Gro Wh

DE Corr Lou HVV Stee Is F Ver Pt Recc Si M LA X. De Th Ex ar En Rec Si M L X X Mii Rec Si M L X X Mii Rec Si M L X X Th DH Edd Si M b Do T T

I

S

Issue	Pag	ge I	ssue	P
Today's Motor Design Puts the Brakes on Costs Sep	50	Ecological Responsibility Translates		
Small Motors: Costlier Materials + Simple Design =		into 3 Targets		
Affordable EfficiencySep		Wastewater Treatment Pays Off		
Design Options Growing with Cordless Sep Best of Show Sep		A Cleaner Environment with Gas		
Easy Switching		Greener Lawns		
High-Tech Link for Computers Oct		4th Annual DFM Roundtable—Purchasing: DFM Conduit	ЭСР	71
4th Annual DFM Roundtable—Purchasing: DFM Conduit		Between Design and Suppliers		
Between Design and SuppliersOct		Whirlpool Thinks the World of This Washer		
Fast-Cure Structural Adhesives Oct		DFA at Hoover: Greater Quality at Lower Cost	lov	38
Suppliers Sticking with Solventless Solutions Oct Food-Item Push Buttons for Gas Convection Oct		Multiprocess Plastics Technology Optimizes Part Designs	lov	50
Growth Decade for Housewares Oct		Tatt Designs	·Ov	30
Whirlpool Thinks the World of This WasherNov	32	DIE CASTING		
DFA at Hoover: Greater Quality at Lower CostNov	38	DFM-Driven Suppliers of the Year		
DECICN FOR MANUEL COURING		Suppliers of the Year Honored	lug	63
DESIGN FOR MANUFACTURING Conference Raises Key DFM Issues Jan	8	DFM Symposium & Expo: The Greening of the Appliance Industry	Con	21
Loudspeaker Loses Weight Due to Polystyrene Jan		of the Apphance moustry	sep	21
HVAC Molded in Plastics Jan		DISHWASHERS		
Steel Solutions Jan		Happy New Year for Appliances		
Is Powder Coming On Line for Coated Coil? Jan	59	HVAC Molded in Plastics	Jan	48
Vending Machine Maker's Change to Powder	66	Nylon Coating Racks Up Points Against PVC for KitchenAid Dishwasher	Y	64
Puts Change in Pockets Jan Redesign—Part I: The Investigation Feb		Share of Market		
Simplicity LTH Lawn Tractor Feb		Component/Material Consumption		
Maytag's Dependable DriveFeb	26	Design Trends Add Value to Controls & Sensors		
Lennox' WhisperHeat Furnace Feb		Designing for the '90s		
Xerox Snap Roller/Shaft Assembly Feb		Europe 1992 a Plus for Some Appliance Makers		
Design Trends Add Value to Controls & Sensors Feb The Road to Better Motors: OEM-Driven, DFM-Powered Mar		Isolate-and-Absorb Strategy Quiets Dishwashers	Jun	31
Exhaust System Accelerates Air, Expels Noise	20	to Applying Technology	Int	38
and Excites Sales	23	'Environmentally Friendly' Appliances		
Engineering Plastics in Appliance Motors	24			
Redesign—Part II: The Implementation		DISPENSING EQUIPMENT		
Simplicity LTH Lawn Tractor		DFM-Driven Suppliers of the Year M	lay	39
Maytag's Dependable Drive		DISPLAY DEVICES		
Xerox Snap Roller/Shaft AssemblyMar		DFM-Driven Suppliers of the Year	fav	39
Mini but Mighty Switches		Suppliers of the Year Honored		
Redesign—Part III: The Payoff Apr				
Simplicity LTH Lawn Tractor Apr		DOWNSIZING		
Maytag's Dependable Drive		Vending Machine Makers Coining Lots of Change		
Xerox Snap Roller/Shaft Assembly		Easy Switching	J. i	10
The Art of Part Planning		ELECTRICAL		
DFM-Driven Suppliers of the Year May				
Editorial: Design for Manufacturing and	_	DFM-Driven Suppliers of the Year M	lay	39
Saving the EnvironmentJun	7	Electrical/Electronic Test Equipment Scores High in Payback Potential	Test	54
Modern Fastening Solutions Connected by Ancient Thread	30			
Designing in QuietJun				
The Inside (and Outside) Story			•	
of Inter-City's PTAC Jun				
Insolate-and-Absorb Strategy Quiets Dishwashers Jun	37	Vending Machine Makers Coining Lots of Change		
Broan's Bigger Bathroom Fans Exhaust Noise ProblemJun	40			
Sound-Damping Metals May be Tomorrow's		Electrical/Electronic Test Equipment Scores High		
Competitive Edge Jun	42	in Payback Potential	Jul :	54
3D Plating Process Excises 24 Parts, Cuts Cost		Suppliers of the Year Honored	ug	63
of Medical Appliance	32	EMICCION CTANDADDO		
Connector Count Cut—Cops Capture Communications Capability	33	EMISSION STANDARDS Vending Machine Maker's Change to Powder		
Just the CureJul		Puts More Change in Pockets	Jan	66
Marketing, Not Engineering, Key				
to Applying TechnologyJul		ENAMELING		
Lennox Special Section		Steel Solutions	lan :	50
Lennox' Vision Is Clear: Define and Execute		ENERGY EFFICIENCY		
To Heatcraft, Lennox Is One Customer Among ManyAug		Cooling with Gas	lan '	73
Armstrong Scores High in Synergy Efficiency		Lennox' WhisperHeat Furnace		
Suppliers of the Year Honored		Element Developments: Efficiency Goes Down		
'Design for Recycling'		to the Wire		
DFM Symposium & Expo: The Greening		Redesigns Call for Recycling		
of the Appliance Industry Sep Keynote: Green Appliances Sep		Gas Share Gaining M Comfort Coupled with Convenience J		
Accelerating the Race for CFC Alternatives Sep	24	Hot-Surface Igniters: Two Systems to Evaluate		
'Environmentally Friendly' AppliancesSep	26	The Heat Is On	Jul :	25
		Something's Cooking in Igniters	Jul :	30

1990 Editorial Index	Pa	ige Issa	ıe	Page
Tough Design Choices Ahead for RefrigerationJul Lennox Industries Pulsating with ActionAug				
Armstrong Scores High in Synergy Efficiency		'Recyclable' Is Salable		
Whirlpool's Never-Rest Test System				
Hot Stuff				
DFM Symposium & Expo: The Greening		of the Appliance Industry Sep		
of the Appliance Industry		Keynote: Green Appliances Sep		
Keynote: Green Appliances		Accelerating the Race for CFC Alternatives		
Accelerating the Race for CFC Alternatives Sep 'Environmentally Friendly' Appliances Sep		'Environmentally Friendly' Appliances	20	)
A Cleaner Environment with GasSep		into 3 Targets	31	
Greener Lawns		Wastewater Treatment Pays Off Sep		
Today's Motor Design Puts the Brakes on Cost Sep	50	A Cleaner Environment with Gas Sep		
Speed Queen Takes Charge of Waste Sep		Greener Lawns Sep		
Igniter Innovations for the Kitchen and RoofOct		Insulation Systems Meet Multiple Redesign Needs Sep		
Food-Item Push Button for Gas Convection Oct		Speed Queen Takes Charge of Waste Sep		
3 Hurdles to Pass Enroute to Finish Line	23	Suppliers Sticking with Solventless Solutions Oct Comeback for Porcelain? Powder for Range Parts? Nov		
ENGINEERING		3 Hurdles to Pass Enroute to Finish Line		
Conference Raises Key DFM Issues Jan	8		_	
Software Slashes Inventory 62% Jan	54			
	24	Is Powder Coming On Line for Coated Coil? Jan	59	)
Marketing, Not Engineering, Key	20	Powder Coater Shoots Blanks, Aims	_	
to Applying TechnologyJul 4th Annual DFM Roundtable— Purchasing: DFM Conduit	38	for Appliance OEMs		
Between Design and SuppliersOct	31		30	)
between besign and suppliers	31	in New ApplicationsJun	21	
ENVIRONMENTAL COMFORT		Keynote: Green Appliances Sep		
Happy New Year for Appliances Jan	25	'Environmentally Friendly' Appliances Sep		
Excellence in Design Jan		A Cleaner Environment with Gas Sep	37	7
Lennox' WhisperHeat Furnace (Part I)Feb		Speed Queen Takes Charge of Waste Sep		
Share of MarketFeb		3 Hurdles to Pass Enroute to Finish Line	25	5
Component/Material Consumption Feb Lennox' WhisperHeat Furnace (Part II) Mar		EDCONOMICS .		
HVAC Challenges AheadApr		Easy Switching Oct	16	
Lennox' WhisperHeat Furnace (Part III)		Lasy Switching	10	,
Creative Welds for Compressors		EXPORTING/IMPORTING		
Vinyl Provides Cool Solution		Majors May Take 'Knocks' from Plastics May	25	5
to AC Maker's Assembly Problems		Europe 1992 a Plus for Some Appliance Makers May		
Coated Coil Poised to Penetrate New Areas		Whirlpool Thinks the World of This WasherNov	32	2
Gas Share Gaining May	68	EARDICATED BARTO		
The Inside (and Outside) Story of Inter-City's PTAC	24	FABRICATED PARTS The Art of Part Planning	40	
Broan's Bigger Bathroom Fans Exhaust Noise Problem Jun				
Lennox a Winner in NCCA Design Showcase Jun		Tablicated Faits RoundupApr	31	
Comfort Coupled with Convenience Jun		FANS (component)		
Hot-Surface Igniters: Two Systems to EvaluateJul	23	DFM-Driven Suppliers of the Year May	39	)
Plastics Take Pressure Out of Water HeatingAug				
Lennox International Special Section				
Lennox' Vision Is Clear: Define and Execute			40	,
Lennox Industries Pulsating with Action		to the Wire	48	•
Armstrong Scores High in Synergy EfficiencyAug		Noise ProblemJun	40	)
Keynote: Green Appliances Sep		Comfort Coupled with Convenience Jun		
Accelerating the Race for CFC Alternatives Sep	24			
A Cleaner Environment with Gas Sep	37	FASTENERS/FASTENING SYSTEMS	_	
	50	Added Value Makes Fasteners Pay Feb		
4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers	21	DFM-Driven Suppliers of the Year	39	,
Detween Design and SuppliersOct	31	in New ApplicationsJun	21	
ENVIRONMENTAL ISSUES		New Screw Designs for Fastening Plastics Jun		
HVAC Molded in Plastics Jan	48	Fasteners & Adhesives FileJun		
Steel Solutions Jan	50	Modern Fastening Methods Connected		
Industry Pulls Together to Kick the CFC Habit Jan		by Ancient Thread Jun		
Trio of Technologies for Clean, Clear Water		Leading-Edge Technology Jun	44	
Redesigns Call for Recycling		Marketing, Not Engineering, Key	20	,
Ultrasonic Welding Cuts Time, Labor, Failures	36	to Applying Technology		
and Saving the EnvironmentJun	7	DFM Symposium & Expo: The Greening	03	
Designing in QuietJun		of the Appliance Industry	21	
The Incide (and Outcide) Story		Fast-Cure Structural Adhesives Oct		
of Inter-City's PTAC Jun		Suppliers Sticking with Solventless Solutions Oct		
Isolate-and-Absorb Strategy Quiets Dishwashers Jun	37	Robots of the Future: Specialized, Task-Specific		
Broan's Bigger Bathroom Fans Exhaust		and Dedicated Oct	45	
Noise Problem Jun	40	FINICUES/COATINGS		
Sound-Damping Metals May be Tomorrow's  Competitive Edge	42	FINISHES/COATINGS Steel Solutions Jan	50	1
Marketing, Not Engineering, Key	12	Is Powder Coming On Line for Coated Coil? Jan		
to Applying TechnologyJul	38	-		

Ny for he had been seen as a seen as

1990 Editorial Index			
Issue	Pa	lssi e	e Page
Comeback for Porcelain? Powder for Range Parts?Nov	20	'Environmentally Friendly' Appliances	
IGNITERS/IGNITION SYSTEMS		Comeback for Porcelain? Powder for Range Parts? Nov Whirlpool Thinks the World of This Washer Nov	
DFM-Driven Suppliers of the Year	39	Uptime Now at 95% Vs 60% Nov	
Hot-Surface Igniters: Two Systems to EvaluateJul	23	MAJORS	
Heating Elements & Igniters FileJul		Happy New Year for Appliances	
Something's Cooking in Igniters	30	Excellence in Design Jan HVAC Molded in Plastics Jan	
of the Appliance Industry	21		
Igniter Innovations for the Kitchen and Roof Oct		Maytag's Dependable Drive (Part I) Feb	26
THICKLY AMYON		Share of Market Feb	
INSULATION DFM-Driven Suppliers of the Year	30	Component/Material Consumption Feb Design Trends Add Value to Controls & Sensors Feb	
Isolate-and-Absorb Strategy Quiets Dishwashers Jun		Whirlpool Range Division Cuts Fat	41
Tough Design Choices Ahead for Refrigeration Jul		from Frame Fabrication Feb	54
Suppliers of the Year Honored		Exhaust System Accelerates Air, Expels Noise	
Insulation Systems Meet Multiple Redesign NeedsSep	5/	and Excites Sales	
INVENTORY		Element Developments: Efficiency Goes Down	30
Software Slashes Inventory 62% Jan	54	to the Wire	
		A Gas Alternative to the Microwave	
JIT Cordets of the '90s: American Manufacturability'		Maytag's Dependable Drive (Part III)	
Cordsets of the '90s: American Manufacturability; European Marketability	44	Redesigns Call for Recycling Apr Designing for the '90s Apr	
Electrical/Electronic Test Equipment Scores High		Majors May Take 'Knocks' from Plastics	
in Payback Potential		Europe 1992 a Plus for Some Appliance Makers May	64
	36	Gas Share Gaining	
4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Oct	31	Coated Coil Poised to Penetrate New Areas	58
Dottroch Design and SuppliersOct	31	in New Applications	21
LABELING		Sound-Damping Metals May be Tomorrow's	
DFM-Driven Suppliers of the Year May		Competitive EdgeJun	
Suppliers of the Year Honored	63	Lennox a Winner in NCCA Design Showcase Jun	
LASERS		Something's Cooking in Igniters Jul Microwave Oven Seal Serves Dual Purpose Jul	
Restoring Luster to Steel	20		31
The Art of Part PlanningApr		to Applying TechnologyJul	
LATCHES		Thermostats Tilt Toward Tighter Tolerances	
LATCHES DFM-Driven Suppliers of the Year May	30	An All-Plastic Appliance?	
Leave Leave Company of the rem			
	37	Ecological Responsibility Translates	20
LAWN AND GARDEN		Ecological Responsibility Translates into 3 Targets	31
LAWN AND GARDEN Excellence in Design	36	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep	31
LAWN AND GARDEN Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb	36 24	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority	31 34
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out, Working Out Feb	36 24 33	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep	31 34 60
LAWN AND GARDEN         Jan           Excellence in Design         Jan           Simplicity LTH Lawn Tractor (Part I)         Feb           Cooking Out; Working Out         Feb           Simplicity LTH Lawn Tractor (Part II)         Mar           Powder Cuts Rejects to 2% from 15%         Mar	36 24 33 34 56	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct	31 34 60 16 42
LAWN AND GARDEN         Jan           Excellence in Design         Jan           Simplicity LTH Lawn Tractor (Part I)         Feb           Cooking Out; Working Out         Feb           Simplicity LTH Lawn Tractor (Part II)         Mar           Powder Cuts Rejects to 2% from 15%         Mar           Simplicity LTH Lawn Tractor (Part III)         Apr	36 24 33 34 56	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Food-Item Push Buttons for Gas Convection Oct	31 34 60 16 42 48
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Festeners and Adhesives Get a Grip	36 24 33 34 56 39	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct	31 34 60 16 42 48
Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun	36 24 33 34 56 39	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Food-Item Push Buttons for Gas Convection Oct	31 34 60 16 42 48
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun	36 24 33 34 56 39	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov	31 34 60 16 42 48 32
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills	36 24 33 34 56 39 21	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Whirlpool Thinks the World of This Washer  MANAGEMENT Happy New Year for Appliances Jan Excellence in Design Jan	31 34 60 16 42 48 32 25 36
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul	36 24 33 34 56 39 21 42	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan	31 34 60 16 42 48 32 25 36 71
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug	36 24 33 34 56 39 21 42 36 20	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb	31 34 60 16 42 48 32 25 36 71 35
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug	36 24 33 34 56 39 21 42 36 20 38	Ecological Responsibility Translates into 3 Targets Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Landington Jan Industry Pulls Together to Kick the CFC Habit Market Share Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers	31 34 60 16 42 48 32 25 36 71 35 35
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep	36 24 33 34 56 39 21 42 36 20 38	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Market Share Component/Material Consumption Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr	31 34 60 16 42 48 32 25 36 71 35 35
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep	36 24 33 34 56 39 21 42 36 20 38 70	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Excellence in Design Industry Pulls Together to Kick the CFC Habit Market Share Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr DFM-Driven Suppliers of the Year Apr	31 34 60 16 42 48 32 25 36 71 35 35 29 39
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan	36 24 33 34 56 39 21 42 36 20 38 70	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Igniter Innovations for the Kitchen and Roof Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr Europe 1992 a Plus for Some Appliance Makers May	31 34 60 16 42 48 32 25 36 71 35 35 29 39
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep	36 24 33 34 56 39 21 42 36 20 38 70	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Excellence in Design Industry Pulls Together to Kick the CFC Habit Market Share Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr DFM-Driven Suppliers of the Year Apr	31 34 60 16 42 48 32 25 36 71 35 35 29 39 64
Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Steelmakers Step Up Services Jan Is Powder Coming On Line for Coated Coil? Jan	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design DFM-Driven Suppliers of the Year Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Age	31 34 60 16 42 48 32 25 36 71 35 35 35 29 39 64
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep  LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Steelmakers Step Up Services Jan Steelmakers Step Up Services Jan Maytag's Dependable Drive (Part I) Feb	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Igniter Innovations for the Kitchen and Roof Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Indepty New Year for Appliances Jan Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug	31 34 60 16 42 48 32 25 36 71 35 35 35 29 39 64
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage IIIs of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Steelmakers Step Up Services Jan Is Powder Coming On Line for Coated Coil? Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Jan Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design DFM-Driven Suppliers of the Year Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug DFM Symposium & Expo: The Greening	31 34 60 16 42 48 32 25 36 71 35 35 29 39 64 38 31 63
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Is Powder Coming On Line for Coated Coil? Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Igniter Innovations for the Kitchen and Roof Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Indepty New Year for Appliances Jan Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug	31 34 60 16 42 48 32 25 36 71 35 35 29 39 64 38 31 63
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage IIIs of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Steelmakers Step Up Services Jan Is Powder Coming On Line for Coated Coil? Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Design Trends Add Value to Controls & Sensors Feb Maytag's Dependable Drive (Part II) Mar	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35 34 47 36	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr DFM-Driven Suppliers of the Year Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Sep	31 34 60 16 42 48 32 25 36 71 35 35 35 29 39 64 38 31 63 21
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage IIIs of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Steelmakers Step Up Services Jan Is Powder Coming On Line for Coated Coil? Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Design Trends Add Value to Controls & Sensors Feb Maytag's Dependable Drive (Part III) Mar Maytag's Dependable Drive (Part III) Mar Maytag's Dependable Drive (Part III) Apr	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35 47 36 40 40 40 40 40 40 40 40 40 40 40 40 40	Ecological Responsibility Translates into 3 Targets Wastewater Treatment Pays Off Appliance Pretreatment Top Priority with Coil Coater Easy Switching Oct Igniter Innovations for the Kitchen and Roof Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov  MANAGEMENT Happy New Year for Appliances Jan Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr DFM-Driven Suppliers of the Year Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Sep 4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Oct	31 34 60 16 42 48 32 25 36 71 35 35 35 29 39 64 38 31 63 21
Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Is Powder Coming On Line for Coated Coil? Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Design Trends Add Value to Controls & Sensors Feb Maytag's Dependable Drive (Part II) Mar Maytag's Dependable Drive (Part III) Mar Maytag's Dependable Drive (Part III) Apr Redesigns Call for Recycling Apr	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35 47 40 54	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr DFM-Driven Suppliers of the Year Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Sep 4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Oct	31 34 60 16 42 48 32 25 36 71 35 35 35 29 39 64 38 31 63 21
Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Steelmakers Step Up Services Jan Steelmakers Step Up Services Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Maytag's Dependable Drive (Part II) Mar Maytag's Dependable Drive (Part III) Mar Maytag's Dependable Drive (Part III) Apr Redesigns Call for Recycling Apr Designing for the '90s Apr	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35 47 36 40 54 60 60 60 60 60 60 60 60 60 60 60 60 60	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Igniter Innovations for the Kitchen and Roof Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Arabeit Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Sep 4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Oct	31 34 60 16 42 48 32 25 36 71 35 35 35 29 39 64 38 31 63 21 31
Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Is Powder Coming On Line for Coated Coil? Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Design Trends Add Value to Controls & Sensors Feb Maytag's Dependable Drive (Part II) Mar Maytag's Dependable Drive (Part III) Mar Maytag's Dependable Drive (Part III) Apr Redesigns Call for Recycling Apr	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35 47 36 40 40 40 40 40 40 40 40 40 40 40 40 40	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Food-Item Push Buttons for Gas Convection Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr DFM-Driven Suppliers of the Year Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Sep 4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Oct	31 34 60 16 42 48 32 25 36 71 35 35 35 39 64 38 31 63 21 31 8 52
Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan HVAC Molded in Plastics Jan Is Powder Coming On Line for Coated Coil? Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Design Trends Add Value to Controls & Sensors Feb Maytag's Dependable Drive (Part II) Mar Maytag's Dependable Drive (Part III) Apr Redesigns Call for Recycling Apr Designing for the '90s Apr Majors May Take 'Knocks' from Plastics May Coated Coil Poised to Penetrate New Areas May Sound-Damping Metals May be Tomorrow's	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35 35 47 36 40 54 60 54 54 60 54 54 54 54 54 54 54 54 54 54 54 54 54	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Igniter Innovations for the Kitchen and Roof Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apriven Suppliers of the Year Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Sep 4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Oct  MANUFACTURING Conference Raises Key DFM Issues Jan Redesign—Part I: The Investigation Feb	31 34 60 16 42 48 32 25 36 71 35 35 35 35 29 39 64 38 31 63 21 31 8 52 59 23 23
Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan Steelmakers Step Up Services Jan Steelmakers Step Up Services Jan Steelmakers Step Up Services Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Design Trends Add Value to Controls & Sensors Feb Maytag's Dependable Drive (Part II) Apr Redesigns Call for Recycling Apr Redesigns Call for Recycling Apr Majors May Take 'Knocks' from Plastics May Coated Coil Poised to Penetrate New Areas May Sound-Damping Metals May be Tomorrow's Competitive Edge Jun	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35 47 36 40 25 54 40 25 54 40 40 40 40 40 40 40 40 40 40 40 40 40	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Igniter Innovations for the Kitchen and Roof Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Appliance OEMs, Steel Service Centers Talk Design Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Appliance Industry Sep 4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Jan Is Powder Coming On Line for Coated Coil? Jan Is Powder Coming On Line for Coated Coil? Jan Is Powder Coming On Line for Coated Coil? Jan Is Powder Coming On Line for Coated Coil? Jan Is Powder Coming On Line for Coated Coil? Feb Simplicity LTH Lawn Tractor Feb	31 34 60 16 42 48 32 25 36 71 35 35 35 29 39 64 38 31 63 21 31 8 52 59 59 59 59 59 59 59 59 59 59
LAWN AND GARDEN  Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip Jun Fasteners and Adhesives Get a Grip Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan Steelmakers Step Up Services Jan Steelmakers Step Up Services Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Component/Material Consumption Feb Maytag's Dependable Drive (Part II) Mar Maytag's Dependable Drive (Part III) Apr Maytag's Dependable Drive (Part III)	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 59 26 35 35 47 36 40 25 54 40 25 54 40 40 40 40 40 40 40 40 40 40 40 40 40	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Igniter Innovations for the Kitchen and Roof Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Excellence in Design Jan Industry Pulls Together to Kick the CFC Habit Jan Market Share Feb Component/Material Consumption Feb Roundtable: Appliance OEMs, Steel Service Centers Talk Design Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Sep 4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Oct  MANUFACTURING Conference Raises Key DFM Issues Jan Is Powder Coming On Line for Coated Coil? Jan Redesign—Part I: The Investigation Feb Simplicity LTH Lawn Tractor Feb Maytag's Dependable Drive Feb	31 34 60 16 42 48 32 25 36 71 35 35 35 36 43 38 31 63 21 31 8 52 59 29 23 24 26
Excellence in Design Jan Simplicity LTH Lawn Tractor (Part I) Feb Cooking Out; Working Out Feb Simplicity LTH Lawn Tractor (Part II) Mar Powder Cuts Rejects to 2% from 15% Mar Simplicity LTH Lawn Tractor (Part III) Apr Fasteners and Adhesives Get a Grip in New Applications Jun Sound-Damping Metals May Be Tomorrow's Competitive Edge Jun Crankshaft Seal Cures In-Storage Ills of Briggs & Stratton Engine Jul An All-Plastic Appliance? Aug Greener Lawns Sep Design Options Growing with Cordless Sep LAUNDRY APPLIANCES Happy New Year for Appliances Jan Steelmakers Step Up Services Jan Steelmakers Step Up Services Jan Steelmakers Step Up Services Jan Maytag's Dependable Drive (Part I) Feb Share of Market Feb Component/Material Consumption Feb Design Trends Add Value to Controls & Sensors Feb Maytag's Dependable Drive (Part II) Apr Redesigns Call for Recycling Apr Redesigns Call for Recycling Apr Majors May Take 'Knocks' from Plastics May Coated Coil Poised to Penetrate New Areas May Sound-Damping Metals May be Tomorrow's Competitive Edge Jun	36 24 33 34 56 39 21 42 36 20 38 70 25 48 52 26 35 35 35 47 40 54 60 60 54 60 60 54 60 54 60 54 60 54 60 60 54 60 60 54 60 54 60 54 60 60 54 60 60 54 60 60 54 60 54 60 54 60 54 60 54 60 60 54 60 54 60 60 54 60 60 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	Ecological Responsibility Translates into 3 Targets Sep Wastewater Treatment Pays Off Sep Appliance Pretreatment Top Priority with Coil Coater Sep Easy Switching Oct Igniter Innovations for the Kitchen and Roof Oct Igniter Innovations for the Kitchen and Roof Oct Whirlpool Thinks the World of This Washer Nov MANAGEMENT Happy New Year for Appliances Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Jan Industry Pulls Together to Kick the CFC Habit Appliance OEMs, Steel Service Centers Talk Design Apr Europe 1992 a Plus for Some Appliance Makers May Marketing, Not Engineering, Key to Applying Technology Jul Lennox International Special Section Aug Suppliers of the Year Saluted Aug DFM Symposium & Expo: The Greening of the Appliance Industry Appliance Industry Sep 4th Annual DFM Roundtable—Purchasing: DFM Conduit Between Design and Suppliers Jan Is Powder Coming On Line for Coated Coil? Jan Is Powder Coming On Line for Coated Coil? Jan Is Powder Coming On Line for Coated Coil? Jan Is Powder Coming On Line for Coated Coil? Jan Is Powder Coming On Line for Coated Coil? Feb Simplicity LTH Lawn Tractor Feb	31 34 60 16 42 48 32 25 36 71 35 35 35 29 39 64 38 31 63 21 31 8 8 5 2 5 9 2 9 2 8 8 8 8 8 8 8 8 8 8 8 8 8

1990 Editorial Index Issue	Pa	ige Is	sue	Page
'Recyclable' Is Salable				- uge
Appliance Protectment Top Priority	21		6	= 6
Appliance Pretreatment Top Priority with Coil Coater	60	Breeze Through Parts Design	in 3	90
		into 3 Targets		21
Steel: Merging Marketing with R&D and Manufacturing	04	mio 5 Targets	ъ.	,,
Opens New Resources to the OEM	45			FO.
MOLDED PARTS		Is Powder Coming On Line for Coated Coil? Ja  Vending Machine Maker's Change to Powder	ın 3	)9
HVAC Molded in Plastics Jan	48	Puts More Change in Pockets Ja	ın 6	56
Vinyl Provides Cool Solution		Appliance Pretreatment Top Priority		
to AC Maker's Assembly Problems		with Coil Coater	p 6	50
Majors May Take 'Knocks' from Plastics				
Plastics Online in Business/Office Products	28	and Dedicated O	ct 4	15
in Housewares May				
Thermoplastic Leaves OEMs 'Steamed' and 'Heartened' May				
Plastics File May		The Art of Part Planning	pr 4	19
DFM-Driven Suppliers of the Year May	39			
The Inside (and Outside) Story		PARTS REDUCTION		
of Inter-City's PTACJun	34			
Lennox a Winner in NCCA Design Showcase	49	Simplicity LTH Lawn Tractor Fe		
3D Plating Process Excises 24 Parts, Cuts Cost of Medical Appliance	22	Maytag's Dependable Drive Fe		
Connector Count Cut—Cops Capture	32	Lennox' WhisperHeat Furnace Fe Xerox Snap Roller/Shaft Assembly Fe		
Communications Capability	33			
An All-Plastic Appliance?	20	Redesign—Part II: The Implementation		
Plastics Take Pressure Out of Water HeatingAug		Simplicity LTH Lawn Tractor		
'Recyclable' Is Salable		Maytag's Dependable Drive		
Plastics File	29	Lennox' WhisperHeat Furnace		
Suppliers of the Year Honored	63	Xerox Snap Roller/Shaft Assembly		
DFM Symposium & Expo: The Greening		Redesign—Part III: The Payoff	pr 3	39
of the Appliance Industry Sep	21	Simplicity LTH Lawn Tractor	pr 3	39
		Maytag's Dependable Drive		
MOTORS		Lennox' WhisperHeat Furnace		
The Road to Better Motors: OEM-Driven, DFM-Powered Mar	20		pr 4	12
Exhaust System Accelerates Air, Expels Noise		Modern Fastening Solutions Connected		
and Excites Sales		by Ancient Thread Ju 3D Plating Process Excises 24 Parts, Cuts Cost	in 3	30
Engineering Plastics in Appliance Motors			.1 2	22
DFM-Driven Suppliers of the Year May		of Medical Appliance	11 3	12
Isolate-and-Absorb Strategy Quiets Dishwashers Jun		Communications Capability	1 3	13
Sound-Damping Metals May be Tomorrow's	5,	An All-Plastic Appliance?		
Competitive Edge Jun	42		0 -	
Leading-Edge Technology Jun		Between Design and Suppliers Oc	ct 3	31
Tough Design Choices Ahead for Refrigeration Jul	49			
An All-Plastic Appliance?		DFA at Hoover: Greater Quality at Lower CostNo	v 3	18
Suppliers of the Year Honored	63			
DFM Symposium & Expo: The Greening		PC BOARDS		
		PC Power Packed in Portability		
Sep Small Motors: Costlier Materials + Simple Design =	50	High-Tech Link for Computers	et 2	.4
Affordable EfficiencySep	53	PERSONAL CARE		
Brushless DC: Fast Enough to Clean Arteries Sep	55			
		HVAC Molded in Plastics Ja		
NAMEPLATES		Designing for the '90s	or 6	0
DFM-Driven Suppliers of the Year May	39			
NOISE REDUCTION		in Housewares		32
Lennox' WhisperHeat Furnace (Part I)	26	Easy Switching	-	
Lennox' WhisperHeat Furnace (Part II)		Easy Switching	. 1	U
Lennox' WhisperHeat Furnace (Part III)		PLASTICS		
Designing in Quiet Jun			n 3	36
The Inside (and Outside) Story		Loudspeaker Loses Weight Due to Polystyrene Ja		
of Inter-City's PTAC Jun	34	HVAC Molded in Plastics Ja	n 4	8
	37	Materials Innovations		
Broan's Bigger Bathroom Fans Exhaust		Is Powder Coming On Line for Coated Coil? Ja	n 5	9
Noise Problem Jun	40			
Sound-Damping Metals May be Tomorrow's		for KitchenAid Dishwasher Ja		
Competitive Edge Jun	42	How to Succeed at Foiling		
OUTDOOR APPLIANCES		Engineering Plastics in Appliance Motors		
Cooking Out; Working OutFeb	22	Restoring Luster to Steel	n 2	U
Gas Share Gaining		Talk Design	vr 2	Q
An All-Plastic Appliance?		Redesigns Call for Recycling		
Greener Lawns			. 3	
		to AC Maker's Assembly Problems	y 2	3
PACKAGING		Majors May Take 'Knocks' from Plastics		
DEM-Driven Suppliers of the Year May	30	Plastics Online in Rusiness/Office Products Ma	. 2	90

'So in The Plate of Plate of Market of Plate of Market of Plate of Installation of Plate of Plate of Installation of Plate of Installation of Plate of Plate

P(

Po for Co

Po Di Fa iii Su

Po Co Do Ea Po

Pl Is Co

Pi A S<sub>I</sub> Pi Pi

1990 Editorial Index Issue	Pa	ge Issu	ıe	Page
Lennox' WhisperHeat Furnace (Part II)				- ugo
Lennox' WhisperHeat Furnace (Part III)	41	DFM-Driven Suppliers of the Year May	30	9
Designing in QuietJun	33	Leading-Edge Technology Jun	4	4
The Inside (and Outside) Story				
of Inter-City's PTAC Jun	34	RESEARCH AND DEVELOPMENT		
	37	Lennox' Vision Is Clear: Define and Execute		
Broan's Bigger Bathroom Fans Exhaust	40	Lennox Industries Pulsating with Action		
Sound-Damping Metals May be Tomorrow's	40	'Environmentally Friendly' Appliances Sep		
Competitive Edge Jun	42	Today's Motor Design Puts the Brakes on Costs Sep	5	0
		Small Motors: Costlier Materials + Simple Design =		
RECYCLING		Affordability Efficiency Sep	5	3
Redesigns Call for Recycling Apr	54	4th Annual DFM Roundtable—Purchasing: DFM Conduit	-	
Tough Design Choices Ahead for RefrigerationJul		Between Design and Suppliers Oct Steel: Merging Marketing with R&D and Manufacturing	3	1
'Recyclable' Is Salable		Opens New Resources to the OEM	4	5
'Environmentally Friendly' Appliances			**	
Ecological Responsibility Translates		ROBOTS		
into 3 Targets			3	4
Greener Lawns Sep	38			_
DEDECION		and Dedicated Oct 3 Hurdles to Pass Enroute to the Finish Line Nov		
REDESIGN Redesign—Part I: The Investigation Feb	23			
Simplicity LTH Lawn Tractor	24	Tuzzy Eogic Fundamental to Vacuum-Cicanol Robot	9	,
Maytag's Dependable DriveFeb		RUBBER PARTS		
Lennox' WhisperHeat Furnace Feb	28	DFM-Driven Suppliers of the Year	3	9
Xerox Snap Roller/Shaft Assembly Feb			6	3
Redesign—Part II: The Implementation			2	
Simplicity LTH Lawn Tractor		of the Appliance Industry Sep Injection Molding with Liquid SiliconesNov	5	3
Lennox' WhisperHeat Furnace		injection wording with Enquire Streeties	3.	3
Xerox Snap Roller/Shaft Assembly		SEALS/SEALANTS		
Redesign—Part III: The Payoff	39	Just the CureJul	3	4
Simplicity LTH Lawn Tractor		Crankshaft Seal Cures In-Storage Ills		
Maytag's Dependable Drive			3	6
Lennox' WhisperHeat Furnace Apr Xerox Snap Roller/Shaft Assembly Apr			3	/
Redesigns Call for Recycling				
Isolate-and-Absorb Strategy Quiets Dishwashers Jun			4	7
Crankshaft Seal Cures In-Storage Ills		DFM-Driven Suppliers of the Year May	3	9
of Briggs & Stratton Engine			4	1
An All-Plastic Appliance?	20	COCKETC		
'Environmentally Friendly' Appliances Sep Insulation Systems Meet Multiple Redesign Needs Sep	57	Leading-Edge Technology Jun	4	4
REFRIGERATION Happy New Year for Appliances	25	SOFTWARE	2	=
HVAC Molded in Plastics Jan	48	Happy New Year for Appliances Jan Software Slashes Inventory 62% Jan	5	4
Steel Solutions Jan				
Software Slashes Inventory 62% Jan				
Is Powder Coming On Line for Coated Coil? Jan			_	
Industry Pulls Together to Kick the CFC Habit Jan		on Small CNCs Jun	5	4
Cooling with Gas Jan Share of Market Feb			5	6
Component/Material Consumption Feb			,	U
The Road to Better Motors: OEM-Driven, DFM-Powered Mai			5	4
Creative Welds for Compressors				
Designing for the '90s			_	
Majors May Take 'Knocks' from Plastics		Ultrasonic Welding Cuts Time, Labor, Failures Apr	5	6
Coated Coil Poised to Penetrate New Areas May Gas Share Gaining May		SOLENOIDS		
Fasteners and Adhesives Get a Grip	00	DFM-Driven Suppliers of the Year May	3	9
in New Applications	21			
The Inside (and Outside) Story		SPC		
of Inter-City's PTAC Jun			_	
Lennox a Winner in NCCA Design Showcase	49	in Payback PotentialJul 4th Annual DFM Roundtable—Purchasing: DFM Conduit	3	4
Marketing, Not Engineering, Key to Applying TechnologyJul	38		3	1
Tough Design Choices Ahead for RefrigerationJul			-	
To Heatcraft, Lennox Is One Customer Among ManyAug	46	STAINLESS STEEL		
Armstrong Scores High in Synergy Efficiency				
Whirlpool's Never-Rest Test System			2	6
Keynote: Green Appliances Sep Accelerating the Race for CFC Alternatives Sep				5
Ecological Responsibility Translates	24	Opens New Resources to the OLM	4	-
into 3 TargetsSep	31	STAMPINGS		
Wastewater Treatment Pays Off Sep	34	DFM-Driven Suppliers of the Year May		
Suppliers Sticking with Solventless Solutions Oct	37	Evaluating Stamping SourcesNov	4	4

STI HII EU TO A Inst STI Sto Mi W fri Sto Di Lee Mi Su Sto C

SU Add Th Ex an Re S M L X Mi To 4th B

0

1990 Editorial Index Issue	Pag	ge Iss	ue P
Switches, Connectors & Cords File	29	The Road to Better Motors: OEM-Driven,	
4th Annual DFM Roundtable—Purchasing: DFM Conduit		DFM-Powered Mar	20
Between Design and SuppliersOct	31	A Vac That Talks	70
Fast-Cure Structural Adhesives Oct			
Suppliers Sticking with Solventless Solutions Oct	37	European Marketability Apr	44
Igniter Innovations for the Kitchen and RoofOct	42		
Robots of the Future: Specialized, Task-Specific		in Payback Potential Jul	54
and Dedicated Oct		4th Annual DFM Roundtable—Purchasing: DFM Conduit	
Lit/FactsOct		Between Design and SuppliersOct	31
Comeback for Porcelain? Powder for Range Parts? Nov	20	Fuzzy Logic Fundamental to Vacuum-Cleaner Robot Nov 57	
3 Hurdles to Pass Enroute to Finish Line Nov	25	*********	
Finishing Materials & Equipment File		VALVES	00
Coil Coater Fine Tunes Inspection Nov	28	Custom Valve Helps Prevent Jamming in Copier Aug	82
Uptime Now at 95% Vs 60%	42	VENDING MACHINES	
Evaluating Stamping Sources	44	VENDING MACHINES Vending Machine Maker's Change to Powder	
	45	Puts More Change in PocketsJan	66
	43	Peristaltic Pump Preserves Pounds Jan	
Multiprocess Plastics Technology Optimizes Part Designs	50	Vending Machine Makers Coining Lots of ChangeFeb	
Injection Molding with Liquid Silicones	53	The Road to Better Motors: OEM-Driven,	43
	55	DFM-Powered Mar	20
Plastic Process Equipment	33	Element Developments: Efficiency Goes Down	20
SWITCHES		to the Wire Mar	. 40
Design Trends Add Value to Controls & Sensors Feb	47	to the write Mar	40
Mini but Mighty Switches		VIDEO PRODUCTS	
DFM-Driven Suppliers of the Year	39	Happy New Year for Appliances	25
Leading-Edge TechnologyJun	44	Excellence in Design Jan	
Suppliers of the Year Honored		HDTV: Watch for It by the Mid-1990s	
DFM Symposium & Expo: The Greening	50	Audio/Video: Tuned into the '90s	
	21	The state of the s	0.
	16	WASHERS (component)	
Switches, Connectors & Cords FileOct		DFM Symposium & Expo: The Greening	
		of the Appliance IndustrySep	21
TAPES			-
Leading-Edge Technology	44	WASTE MANAGEMENT	
		'Recyclable' Is Salable Aug	27
TELECOMMUNICATIONS		'Environmentally Friendly' AppliancesSep	
Happy New Year for Appliances	25	Wastewater Treatment Pays OffSep	
Excellence in DesignJan	36	Speed Queen Takes Charge of Waste	64
Share of Market Feb	39		
		WATER HEATERS	
TERMINALS		Happy New Year for Appliances	
		Share of MarketFeb	
Efficient Termination	27	Lennox a Winner in NCCA Design ShowcaseJun	49
		Marketing, Not Engineering, Key	
TESTING EQUIPMENT		to Applying TechnologyJul	
	39	Plastics Take Pressure Out of Water Heating Aug	26
Electrical/Electronic Test Equipment Scores High			
in Payback Potential Jul	54		
Greater Inspection Capability		Marketing, Not Engineering, Key	
for Your Time and Money	69	to Applying Technology Jul	
Trim Maker's Test Scratches the Future		Thermostats Tilt Toward Tighter Tolerances Jul	41
	71	WARD TO A TRACKET	
	14	WATER TREATMENT (consumer)	
DFM Symposium & Expo: The Greening	21	Excellence in Design	36
of the Appliance Industry Sep	21	Tho of Technologies for Clean, Clear water Mar	03
THEDMAI INCH ATION		WEI DING	
THERMAL INSULATION DEM Driven Suppliers of the Year	20	WELDING Steelmakers Steen Un Services	F2
		Steelmakers Step Up Services	52
Insulation Systems Meet Multiple Redesign Needs Sep	4/	Whirlpool Range Division Cuts Fat	54
THERMOSTATS		from Frame Fabrication	
	20	Ultrasonic Welding Cuts Time, Labor, Failures Apr	
		Creative Welds for Compressors	
The mosains the roward righter role ancesJul	71	Efficient Termination	
TIMERS		Robots of the Future: Specialized, Task-Specific	21
	39	and DedicatedOct	45
	63	Steel: Merging Marketing with R&D and Manufacturing	13
Supplies of the Total Montes	05	Opens New Resources to the OEM	45
TRAINING		1	-
	46	WIRE	
		Ultrasonic Welding Cuts Time, Labor, Failures Apr	56
MR INVESTOR		DFM-Driven Suppliers of the Year	
TUBING	39		
		WORKSTATIONS	
DFM-Driven Suppliers of the YearMay	46	WORKSTATIONS	
DFM-Driven Suppliers of the Year	46	Whirlpool Saves with Big CAD Capability	
DFM-Driven Suppliers of the Year			54
DFM-Driven Suppliers of the Year	46 36 39	Whirlpool Saves with Big CAD Capability	54

age